

Appl. No. 10/587,415
Amendment dated August 17, 2009
Reply to Office Action of February 17, 2009

Amendments to the Drawings:

Please remove disapproved proposed FIG. 20 from the application.

REMARKS/ARGUMENTS

The undersigned attorney appreciates the Examiner's willingness to discuss the status of case over the telephone on May 28, 2009. Prior to the telephone interview, the undersigned had faxed proposed amended claim language to the Examiner. During the telephone interview, the Examiner indicated that the Applicant would have to file a Request for Continued Examination in order for amended claims to be considered since the outstanding Office Action had been made final.

During the telephone interview, the undersigned attorney and the Examiner discussed the prior art references, and in particular the teachings of Sadow et al., Moon, Sr., and Chomard as contrasted to the innovative features of the present invention. The overall purpose of the present invention was discussed, namely, to implement trolley-like features in wheeled luggage and its preferred implementation, namely, the claimed rearward incline so that more weight is on the rear unidirectional, non-retractable wheels and the front, retractable, multi-directional steering wheel bears less weight and is more maneuverable. The undersigned attorney and the Examiner also discussed the Applicant's willingness to withdraw proposed Fig. 20 from the case. As mentioned, since the interview was conducted after a final rejection, the Examiner indicated that the Applicant should file a Request for Continued Examination, along with proposed claim amendments and arguments in writing.

Drawing - Proposed Fig. 21 Withdrawn

In the outstanding Office Action, the Examiner disapproved proposed drawing filed November 20, 2008, which included new proposed FIG. 20 indicating the use of a car seat. In response, Applicant expressly withdraws proposed FIG. 20 from consideration. The corrected drawing sheets would simply require the removal of proposed FIG. 20. For the sake of simplicity, the undersigned has not resubmitted a new set of drawings.

The undersigned attorney has also specifically amended the specification to remove the reference to the proposed new FIG. 20 which has been disapproved in case these amendments

to the specification had been entered. In addition, the Applicant has canceled patent claims 22 and 23 which were directed to the car seat limitation.

Claim Amendments

The application has been amended to now include three independent claims, namely claim 1, and new independent claims 25 and 26. Independent claim 1 has been amended. Dependent claims 10, 18 and 19 have been canceled because these limitations have been incorporated into independent claim 1. New claim 24 has been added as a dependent claim to claim 1. Dependent claims 3 and 12 have been amended to fix minor inconsistencies or typographical errors. Dependent claim 20 has been amended to make a clarifying amendment, to change the term 'centre of gravity' to 'weight'. This has support from Dependent claims 13, 15 and 21 stand withdrawn in response to the election following the restriction requirement which was issued earlier in prosecution of this case.

Also, as mentioned, the application has been amended to include independent claims 25 and 26. New claim 27 is dependent on independent claim 26. Respectfully, the Applicant believes that each of the independent claims defines novel, non-obvious subject matter for at least the following reasons.

Independent Claim 1

Claim 1 has been amended to recite that the support wheels are non-retractable wheels. Claim 1 is novel over the prior art as there are no wheeled luggage cases in the prior art having a bottom wall that is at an incline with respect to the ground when a steering wheel assembly is in an active position, and which have non-retractable unidirectional support wheels at one end of the bottom wall and a retractable steering wheel assembly distanced from the steering wheels.

Chomard discloses a luggage case which has a bottom wall that is inclined with respect to the ground when the case is configured for wheeling with its large bottom wall facing the ground, however Chomard differs from the invention of the claim as amended as in Chomard all four of the wheels are retractable. The undersigned attorney has submitted an English version

Abstract and a machine translation of the Chomard reference, including a translation of the description and a translation of the claims. This information was obtained from esp@cenet.com database provided by the European Patent Office.

It would not have been obvious to modify the case of Chomard to make the non-steerable wheels 9 non-retractable as the lever mechanism for retraction of wheels has been designed specifically for retraction of both the front and rear wheels, and could not easily be modified to allow retraction of just the front or rear wheels. The case of Chomard has been deliberately designed to have an extensive, external, articulated lever mechanism made up of struts 15, 22, 23, 19, 13, to achieve retraction and extension of all four wheels, the lever mechanism incorporating an integral extendable handle 18, 16, 17. Not only would it go against the teaching of Chomard to modify the case of Chomard to allow retraction of just one set of wheels, but it would also require many complex and non-straightforward modifications to adapt the case to allow for retraction of just one set of wheels, whilst maintaining the handle for pushing the case. Furthermore, modification of the non-steerable wheels 9 such that they are non-retractable would go against the teaching of Chomard, which is that the non-steerable wheels 9 should be retractable to the position shown in figure 2, showing that the retracted wheels 9 may protrude from the forward side 27 of recess 11, but not downward from the recess 11 (see Paras. 7 and 19 of the English machine translation of Chomard). This is to allow wheeling of the case in a more upright position, on the non-steerable wheels 9 only (see Paras. 7 and 19 of the English machine translation of Chomard). The case of Chomard has been deliberately designed such that the non-steerable wheels 9 protrude from the front of the case when wheels 9 are retracted. When the wheels 9,10 are retracted the case can be wheeled along on non-steerable wheels 9, yet the bottom wall of the case is level with the ground when the steerable wheels 10 and non-steerable wheels 9 are retracted (see figure 2). It would not have been obvious to modify the non-steerable wheels 9 such that they are non-retractable, as the non-retracted wheels would protrude from the base wall of the case when the swivel wheels 10 are retracted, such that the bottom wall of the case would not be level with the ground, which would be unhelpful when opening the luggage after transport.

Advantages of employing non-retractable unidirectional wheels in the present invention rather than having all of the wheels being retractable like in Chomard include the fact that the non-retractable wheels are lighter in weight, more durable, more stable, have increased load carrying capacity, have fewer manufacturing and assembling components, are cheaper and have the ability to 'activate' when the steering wheel assembly is extended and tilts the case backwards. This arrangement optimizes the ease and convenience of activating and inactivating the wheeling system and minimizes the overall weight of wheeling system.

The present invention does not require a wheel retraction lever mechanism (i.e. struts 23, 22, 15, 19, 13) employed in Chomard to retract all four wheels, which protrudes outside the profile of the case when the wheels are retracted and is vulnerable to damage. In the present invention, the steering wheel assembly is substantially within the profile of the luggage receptacle when in the inactive position, as recited by claim 1. Furthermore, a user can stand the luggage receptacle of the present invention on its long, narrow side, whereas the case of Chomard cannot be stood on its long, narrow side due to the protruding wheel retraction lever mechanism. The lever mechanism of the case of Chomard (i.e. struts 23, 22, 15, 19, 13) is extensive and flimsy and considerably increases the weight of the luggage receptacle, whereas the present invention overcomes this problem by providing a lighter, more durable system wherein only the steering wheel assembly is retractable and the unidirectional wheels are non-steerable.

The Examiner contends that bracket 29 of Chomard, which is at the same end as the non-steerable wheels 10, could be used as a handle. However, we submit that bracket 29 is not a handle, nor is it suitable for use as a handle. As indicated in the machine translation of Chomard, bracket 29 is present to prevent luggage placed on top of the case from falling off the front (see Paras. 8 and 23 of the machine translation of Chomard). When extended substantially vertically relative to the ground, the top of the bracket 29 is far too low to be used by a user for pushing the case. The handle 16 in Chomard, when extended, is at the optimal height to guide the trolley (see the end of Para. 5 of the machine translation of Chomard); therefore bracket 29, which is much lower than the handle 16 when both the handle 16 and bracket 29 are extended, is not a suitable

height for use as a handle, and can in no way be considered to be a handle. Furthermore, it is clear from the description and claims of Chomard that the connection between the bracket 29 and the case is not rigid enough to allow the case to be pushed along by bracket 29. Bracket 29 is pivotally connected to the case at pivotal connection points 32 on each side of the case and the bracket 29 can pivot about pivot points 32 between its folded and unfolded positions (see English translation of claim 6). There is a mechanical coupling 33, 39 between the arms 31 of the bracket 29 and the struts 15 of the wheel retraction lever mechanism such that unfolding of the wheel retraction lever mechanism causes lifting of the bracket 29 into the position shown in figure 1 and folding of the lever mechanism causes folding back of the bracket 29 into the position shown in figure 2 (see English translation of claim 6). The purpose of the bracket 29 is to retain items on top of the case and prevent them from falling off the front, however there is no locking mechanism preventing the bracket 29 from folding back towards the case, into its folded position if a force is applied on the bracket 29 towards the rear of the case. If the bracket 29 were pushed by the user such that steerable wheels 10 lead, the bracket 29 would tend to pivot about its pivot points 32 towards the bracket's folded position, and since there is a mechanical coupling 33, 39 between the bracket arms 31 and strut 15, this would cause the wheel retraction mechanism to fold, causing retraction of the wheels 9, 10. Therefore, bracket 29 is in no way suitable for use as a handle for pushing the case. Chomard teaches away from providing a handle which is at the same end of the luggage receptacle as the unidirectional support wheels when the handle is extended, and therefore the present invention is not obvious in light of Chomard.

In the luggage receptacle of Chomard, since the handle 16 is arranged at the same end of the luggage receptacle as the steerable wheels 10 when the handle is deployed, when the luggage receptacle is pushed by the handle 16, only the non-steerable wheels 9 can lead. This is in contrast to the present invention, in which the case is pushable by the handle with the steering wheel assembly leading, as recited by claim 1. The luggage receptacle of Chomard will be difficult to maneuver and steer when being pushed, however the present invention overcomes this problem

by providing a case in which the handle and wheels are arranged such that the steering wheel assembly leads when the luggage receptacle is being pushed by the handle.

Another advantage of the present invention as distinguished from Chomard is that in the particular tilted arrangement of the present invention, the bottom wall is inclined upwardly away from the non-retractable, unidirectional support wheels at the rear end of the case, and the handle is located at the same end of the case as the support wheels when the handle is extended (i.e. the case is *tilted backwards towards the user*). This provides the advantage that a greater portion of the forces act through the support wheels rather than the steering wheel assembly. This backward tilt causes a greater portion of the forces to be shifted backwards towards the user, decreasing the lever arm distance between the load and the point of application of force and thus making the case easier to steer and maneuver. Furthermore, tilting the case backwards away from the front multidirectional steering wheel unloads the steering wheel and makes it easier to maneuver and steer the case. In contrast, the case of Chomard is *tilted forwards away from the user* and Chomard's tilt and handle arrangement shifts forces away from the user, as the bottom wall of the case is tilted forwards, away from the handle 16. This tilt and wheel arrangement in Chomard increases the lever arm distance between the load and the point of application of force and makes the case more difficult to steer and maneuver.

A difficulty encountered in designing push-trolley type luggage cases in which a major wall of the case closely faces the ground and is wheeled along the ground like a trolley is that the undercarriage will tend to sag in the middle due to the weight of the case and the weight of the load, and the undercarriage may drag along the ground. This problem could be overcome by reinforcing the bottom wall of the case, to make it more rigid, however this would increase the weight of the case. Another way of overcoming the problem of sag would be to increase the clearance between the bottom wall and the ground. In the luggage receptacle of Chomard, wheels 9 extend sufficiently far from the bottom wall of the receptacle when extended, to provide sufficient undercarriage clearance even if the steerable wheels 10 did not extend further from the bottom wall than wheels 9 and the bottom wall were level. However, this is a very inefficient way of achieving

undercarriage clearance as the multiple retractable wheels and the corresponding lever mechanism are substantially more heavy, involve more components for manufacture and assembly, increase costs and increase flimsiness. In the present invention, a substantial tilt with only one retractable wheel assembly is employed to provide undercarriage clearance. The retractable steering wheel assembly of the present invention is used in conjunction with unidirectional, non-retractable support wheels, which have many advantages over extendable/retractable wheels, such as reduction in weight, reduction in the number of components for manufacture and assembly, reduction in cost, reduction in flimsiness and increased durability and strength.

In Chomard, the bottom and top walls of the case tilt forwards away from the handle 16, and therefore away from the user, and there will be a tendency for additional pieces of luggage being carried on top of the case to slide off the front of the case when in use. Thus there was a need in Chomard's design to add an extra bracket 29 to support the luggage to prevent the luggage from slipping off the front. This additional bracket further increases overall weight, increases the number of components for manufacturing and assembly and increases cost. In the present invention, the tilt is backwards and in the opposite direction, and additional pieces of luggage on top of the case are supported by the rear handle without the need for an additional bracket as in Chomard's design.

Of note, there was no mention of any tilt, slope or inclination in the description or claims or in anywhere in the specification of Chomard. It would appear that the forward tilt of the bottom wall of the case away from the user in Chomard's design is a design limitation or flaw due to the need for all of the wheels 9, 10 to be retractable by means of an eccentrically positioned lever mechanism (struts 23, 22, 15, 19, 13).

Turning to Sadow, this does not disclose a luggage receptacle having a tilted bottom wall to distribute a greater portion of forces on the support wheels than on the steerable wheels. Sadow teaches use of a receptacle having level wheels, so that the bottom wall of the case is substantially parallel with the ground when the steerable wheels are deployed. This is helpful when opening the luggage after transport, as the receptacle will be substantially horizontal. Hence, it is not obvious or desirable to incline the luggage receptacle of Sadow using the retractable wheels.

Furthermore, it would not be obvious or desirable to incline the luggage receptacle of Sadow such that the steerable wheels extend further from the bottom wall than the support wheels, as the recesses for accommodating the steerable wheels when retracted would need to extend further vertically into the internal space of the receptacle, reducing available internal space within the luggage receptacle. Modifying Sadow such that the steerable wheels extend further from the bottom wall than the support wheels would also increase each wheel's travel distance between the inactive and active positions, which would make the pivot mechanism more flimsy and inconvenient to use, add more stress to the pivot mechanism and increase the weight of the steerable wheels. For these reasons it would not be obvious or desirable to incline the luggage receptacle of Sadow.

It would not have been obvious to modify the case of Sadow in light of Chomard such that the bottom wall of Sadow is tilted with respect to the ground when a steering wheel assembly is in an active position. In Chomard, the bottom wall is inclined relative to the ground in the configuration of figure 1 only because the tilt is necessary to allow for retraction of all four wheels using the particular wheel retraction lever mechanism (i.e. struts 23, 22, 15, 19, 13) employed in Chomard. Chomard does not make any reference to incline of the bottom wall in any part of the description or claims. The tilt of the bottom wall of the luggage receptacle of Chomard does not serve the purpose of overcoming the problem of accommodating any sag in the middle of the bottom wall of the receptacle, as the non-steerable wheels 9 of Chomard provide sufficient clearance between the bottom wall and the ground to overcome any sag, even if the swivel wheels 10 did not extend further from the bottom wall than the non-steerable wheels 9 (see figure 3 of Chomard). As indicated above, in Chomard the handle 16 is at the same end of the luggage receptacle as the swivel wheels 10 when the handle is extended, and the bottom wall of the case tilts forwards away from the user, rather than backwards towards the user, when the user is pushing the case of Chomard by the handle; therefore, the incline of the bottom wall in Chomard increases the lever arm distance between the load and the point of application of force, making the case harder to steer and maneuver. In the luggage receptacle of Chomard, since the case tilts forwards away from

the handle 16 and therefore away from the user, the luggage receptacle requires a bracket 29 in order to prevent items placed on top of the luggage receptacle from falling off the front (see paragraph 23 of the machine translation of Chomard), the bracket increasing the overall weight of the luggage receptacle. For these reasons, the tilt of the bottom wall of the luggage case in Chomard is undesirable, and it would not have been obvious to modify the case of Sadow to have an inclined bottom wall.

If a person of ordinary skill in the art were to try to modify the case of Sadow in light of Chomard to provide the case of Sadow with a tilt, the teaching would be to use a wheel retraction lever mechanism as shown in Chomard, wherein all of the wheels are retractable. It would not have been obvious from the disclosure of Chomard to modify the case of Sadow such that one or more of the wheels are retractable and extend further from the bottom wall when deployed, whilst one or more wheels are non-retractable, as the teaching of Chomard is to employ a wheel retraction lever mechanism in which all of the wheels are retractable.

Even if a person of ordinary skill were to try to modify the case of Sadow to provide a bottom wall with an incline, but using a wheel retraction mechanism other than the wheel retraction lever mechanism (i.e. struts 23, 22, 15, 19, 13) employed in Chomard, they would not arrive at the claimed invention as the case of Sadow is not capable of being pushed, as required by the claim. Sadow discloses an article of towable luggage, and in all of the embodiments, the towing handle is attached to the case by means of a pivoting hinge, which would not allow pushing of the case by the handle.

An advantage of the present invention over Sadow is that the undercarriage tilt of the present invention serves to accommodate any sag in the middle of the bottom wall of the receptacle, preventing a sagging bottom wall from dragging against the ground. In Sadow, inevitable sagging in the middle of the bottom wall would occur. Sadow teaches to overcome this problem by means of the extra retractable wheel in the middle of the bottom wall of the case. It would not have been obvious to seek to incline the bottom wall of the case of Sadow to overcome problems of sag in the bottom wall of the case, as Sadow's luggage receptacle has a wheel in the middle of the bottom wall

which, would prevent the receptacle from sagging in the middle without the need for tilting the bottom wall.

The invention of independent claim 1 as amended is also not obvious based on Sadow in light of Moon. Moon discloses a trolley cart with a bottom wall that is inclined upwardly away from support wheels. However, the steerable wheel of Moon is not retractable. If a person of ordinary skill in the art were to try to modify the luggage receptacle of Sadow in light of the teaching of Moon, they would be led to provide a non-retractable steerable wheel on the bottom wall of the luggage receptacle of Sadow; this is different from the invention of claim 1, which has a retractable steering wheel assembly. It would not have been obvious or desirable to change the steerable wheels of Sadow such that they extend further from the bottom wall than the support wheels when in the active position as the recesses for accommodating the steerable wheels when retracted would need to be larger, reducing available internal space within the luggage receptacle. Furthermore, trying to incorporate retractable wheels having long deployment and retraction travel distances in the luggage receptacle of Sadow would be flimsy, heavier and susceptible to damage during use, and therefore would be impractical and not be considered advantageous. The design in Moon allows "retraction" of the large rear unidirectional wheels by altering the position of the trolley undercarriage (fig 9) relative to the wheels with the use of sturdy, large and heavy lever mechanisms that would not be suitable for incorporation into the luggage case. Moon does not disclose retraction of the front steering wheel assembly within the profile of the trolley. In fact, the unretractable front multidirectional steering wheel is clearly still exposed and vulnerable to damage during transit when the trolley is not in use and the trolley is in the folded position (see fig 9).

All trolley carts, such as airport trolley carts and the trolley cart of Moon, have a vertical bracket of some sort, anterior to the rear wheels, (such as the top end 22 of the frame and vertical member 84 of Moon) to prevent posterior displacement of the load towards the rear wheels. This is a safety feature, to prevent the trolley from toppling backwards onto the user, however it impairs the effect of the incline of the bottom wall of the trolley in shifting any weight towards the rear wheels. Therefore, a person skilled in the art would not consider inclining the bottom wall of a

luggage receptacle as it would be assumed that a vertical bracket anterior to the rear wheels would be required to prevent posterior displacement of the load from items placed on top of the luggage receptacle in order to prevent the luggage case from toppling backwards onto the user.

It would not have been obvious to employ the wheel system from Moon in a luggage case as the wheels of the trolley cart of Moon are required to be large and sturdy in order to support luggage placed on the trolley and would be too large and heavy and impractical to be used in a suitcase. Furthermore, the lever mechanism for retracting the rear unidirectional wheels is too large and heavy and would also not be suitable for use in a luggage case.

The Examiner contends that claim 1 and various of the dependent claims lack novelty in light of Kuo. Applicant respectfully submits that the invention is distinguished from Kuo due to the fact that in the present invention, when the steering wheel assembly and support wheels are in contact with the ground, and when the luggage receptacle is being pushed along by the handle, the steering wheel assembly leads, as recited by claim 1. In contrast, in Kuo, when the steerable wheels and the handle are deployed, the case is pushable by the handle only with the non-steerable wheels 40 leading. The Examiner contends that the limitation that the receptacle is pushable with the steering wheel assembly leading does not impart any structure over Kuo. However, Applicant respectfully submits that this limitation does provide a structural limitation, as the claim covers a structural arrangement of the handle and wheels wherein when the steering wheel assembly is in the active configuration, the steering wheels assembly will lead when the case is pushed, whereas the structural arrangement of the handle and wheels of the case of Kuo are such that when the case of Kuo is pushed by the handle, the non-steerable wheels 40 lead. In fact, the case of Kuo is intended to be towed rather than pushed (see the first and second paragraphs in column 1 of Kuo for example, which describe the case as a hand-trailable luggage case). Even if the case of Kuo were pushed by the handle, the unidirectional wheels 40 will be leading and will cause difficulties in maneuvering and steering.

A further difference between the invention of independent claim 1 and the luggage receptacle of Kuo is that the luggage receptacle of Kuo is upright when being towed, and does not

have a bottom wall that closely faces the ground, as recited by claim 1. The relatively higher centre of gravity in Kuo's design causes the case to be unstable when in use, especially during steering and maneuvering of the case.

Independent Claim 25

Independent claim 25 has the limitations of claim 1 and further recites that the wheeled luggage case only has a single steering wheel assembly. Claim 25 is novel over the prior art as there are no wheeled luggage cases in the prior art having the combination of features of the claim and having a single retractable steering wheel assembly.

All the wheels in Chomard are retractable. In Chomard's design, there are two retractable steering wheel assemblies 10, one on each side of the case, rather than a single steering wheel assembly as recited by the claim 25.

It would not have been obvious to modify the case of Chomard to include a single retractable wheel assembly as it would be assumed that use of a single steering wheel assembly would be less stable than use of the two swivel wheels 10 of Chomard. However, the Applicant has found that by using a single steering wheel assembly and tilting the case backwards where more weight is placed on the widely spaced apart rear support wheels instead of the single front steering wheel assembly, the overall stability of the case would be adequate for the purpose of its function.

There are several advantages in using just one retractable wheel assembly, which are not obvious in light of Chomard or the other prior art, including:

- reducing of the weight of the case
- reducing the number of components for manufacturing and assembly
- reducing cost
- avoiding complex heavy and flimsy lever systems to coordinate multiple wheel retraction like that of Chomard, which is prone to stress at the joints of the lever system and vulnerable to damage in transit since the lever mechanism of either side of the luggage case is exposed
- reducing intrusion into the luggage space (one retractable steering wheel assembly versus two or more)

- allowing arrangement of the single retractable steering wheel assembly on the mid-line of the bottom wall, between the two side walls of the case, helping prevent sag of the undercarriage.

The invention as recited in claim 25 is therefore inventive in light of the prior art.

Of note, if the single steering wheel assembly is used without a backward tilt towards the user (i.e. without the bottom wall being inclined upwardly away from the support wheels, which are at the same end as the handle when in the active position and therefore at the same end as the user), or more pertinently with a reversed forward tilt away from the user as in Chomard's design, the weight of the case will be shifted anteriorly and more weight will be placed on the single front wheel assembly. This will cause significant instability that may preclude practical use of such a design. Thus it would not have been obvious to modify the case of Chomard to include a single retractable wheel assembly as it would be assumed that use of a single steering wheel assembly would be substantially less stable than use of the two swivel wheels 10 of Chomard, especially when there is a reversed forward tilt in Chomard's design.

Independent Claim 26

Independent claim 26 has the limitation of claim 1 and further recites that the steering wheel assembly is connected to the bottom wall by a holding bracket, wherein the steering wheel assembly and holding bracket are within the profile of the luggage receptacle when in the inactive position. Claim 26 is novel over the prior art as there are no wheeled luggage cases in the prior art having the combination of features of the claim, including a steering wheel assembly and holding bracket that are housed within the profile of the luggage when the steering wheel assembly is in the inactive position.

In Chomard, the wheel retraction lever mechanism (i.e. struts 23, 22, 15, 19, 13), which connects and holds the wheels to the luggage case, is not housed within the profile of the luggage when the wheels are retracted, as recited by claim 26. In contrast, in Chomard, struts 23 and 22 clearly protrude from the sides of the luggage case (see figure 2). Furthermore, non-

steerable wheels 9 protrude from the front of the case at recess 11 when retracted (in order that the case can be wheeled along on wheels 9, even when they are retracted).

It would not have been obvious to modify the case of Chomard such that the mechanism holding the retractable wheels is within the profile of the receptacle when the wheels are retracted, as the entire thrust of the teaching of Chomard is to employ a wheel retraction lever mechanism for retraction of all of the four wheels, and it would not be possible to house the wheel retraction lever mechanism of Chomard within a recess. It would not have been obvious to modify the case of Chomard to have individual retractable wheels rather than employ a single wheel retraction lever mechanism for retraction of all four wheels through a single action and wherein the retractable wheels extend further from the bottom wall than non-retractable wheels, as the recesses for accommodating the retractable wheels and holding brackets would need to be larger, reducing available internal space in the case. Furthermore, trying to incorporate retractable wheels having long deployment distances would be assumed to be flimsy and impractical. For at least these reasons, Applicant submits that the invention of claim 26 is inventive in light of the prior art.

Summary

All previous push-trolley type luggage cases have failed and none are presently in the market for this reason. The inventors encountered many difficulties when trying to design a push-trolley type luggage. These difficulties include:

- 1) how to have retractable wheels and at the same time
 - a) have sufficient undercarriage floor clearance to overcome sag
 - b) minimize wheel travel distance to avoid flimsiness and risk of damage to the wheels
- 2) how to minimize the weight of the wheels and lever mechanisms for retraction of the wheels
- 3) how to optimize the ease of use of activation and retraction of multiple wheels (i.e. how to overcome the inconvenience of activation and retraction of multiple wheels)

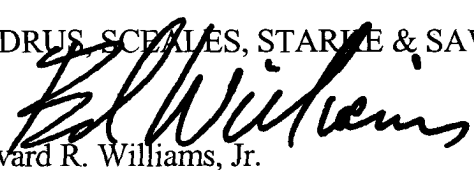
- 4) how to minimize luggage space intrusion by wheels and wheel retraction mechanisms
- 5) how to provide non-exposed wheels and wheel retraction mechanisms when not in use, to minimise damage/wear and tear.
- 6) how to optimise maneuverability and ease of steering the case
- 7) how to optimize stability of the case during maneuvering and steering the case

The invention recited in the independent claims addresses the above issues by providing a case having a bottom wall that is inclined relative to the ground when the case is in the active configuration and by having a retractable steering wheel assembly with at least one multidirectional wheel and support wheels that are non-retractable. This arrangement gives rise to many advantages over the luggage cases of the prior art as discussed above, and is by no means obvious in light of the prior art.

Applicants respectfully submit that the amendments made to the application are sufficient to overcome the outstanding objections and rejections to the application and claims. Therefore, Applicants earnestly requests that the Examiner allow the case to issuance.

Respectfully submitted,

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